



Fermilab

*BEAMS DIVISION
RADIATION SAFETY GROUP*

July 30, 2002

To: Bruce Baller & S.E. Kopp

From: Mike Gerardi

Subject: Comments on the July 24, 2002 Review of the NuMI Monitoring System

My comments are as follows:

1. It was apparent from the discussions that considerable improvement is necessary with respect to the hadron absorber installation, removal, and storage. Doses associated with such a large source do not follow typical fall-off curves.
2. Muon rates continue to be of concern to me, especially since re-alignment of monitors and equipment greatly affect muon rates and positions in the alcoves.
3. It sounds like the alignment of the Ion trays are a problem and it isn't clear whether the accuracy is defined, achievable or even relevant.
4. It wasn't clear to me whether muon monitor alignment behind the absorber could be accomplished with low absorbed dose to personnel.
5. The hadron monitor heating should be defined, more closely examined and documented.
6. Since as the target moves upstream the higher energy pions are focused, one should better understand the dose rates in alcove 1 (2nd alcove). This will affect access.
7. In my mind, the muon alcove regions where access will be allowed has not been defined.